

Title (en)

Apparatus for fixing ceiling panels

Title (de)

Gerät für die Befestigung von Deckplatten

Title (fr)

Appareil pour fixer des plaques sous un plafond

Publication

**EP 1449983 A3 20040908 (FR)**

Application

**EP 04290411 A 20040213**

Priority

FR 0302262 A 20030224

Abstract (en)

[origin: EP1449983A2] The apparatus has a platform (12) vertically moving on a wagon (5) and lifted by a hydraulic jack. A slab support surmounting the platform supports a slab to be fixed on a ceiling. A table moving vertically between the platform and the slab support is lifted by another hydraulic jack. Tools held in rows and columns on the table are turned between two positions by a pneumatic rotation plate (26) fixed at an end of a shaft (25). The tools includes a boring machine to pierce a hole in a ceiling across the slab to be fixed and a pneumatic hammer to plant a pin inside the hole realized by the boring machine. The pneumatic rotation plate turns the tools towards a position in which wires of boring machines are directed towards the ceiling and the hammers are juggled off and the other position in which the hammers are supplied for planting the pins and the boring machines are juggled off. The hydraulic jacks and the rotation plates are controlled by respective control levers.

IPC 1-7

**E04F 21/18**; **B25H 1/00**

IPC 8 full level

**B25H 1/00** (2006.01); **E04F 21/18** (2006.01)

CPC (source: EP)

**B25H 1/0035** (2013.01); **E04F 21/1816** (2013.01)

Citation (search report)

- [A] US 3844467 A 19741029 - MILLICAN W
- [A] DE 2719574 A1 19781109 - HILTI AG
- [A] FR 2750628 A1 19980109 - SOC D EXPL DES ETS RACODON SA [FR]
- [A] PATENT ABSTRACTS OF JAPAN vol. 015, no. 452 (M - 1180) 18 November 1991 (1991-11-18)

Cited by

CN102951466A; CN109914763A; CN113123569A; CN107738364A; WO2005056246A1

Designated contracting state (EPC)

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